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Acute Coronary Syndromes

CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND MORTALITY IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION

Poster Contributions
Hall C
Saturday, March 29, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Acute Coronary Syndromes: Comorbid Considerations
Abstract Category: 1. Acute Coronary Syndromes: Clinical
Presentation Number: 1152-246

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Background: Chronic obstructive pulmonary disease (COPD) is associated with increased incidence of myocardial infarction and long-term cardiac mortality. We sought to evaluate the impact of COPD on in-hospital mortality of patients with ST-Elevation Myocardial Infarction (STEMI).

Methods: Using the Nationwide Inpatient Sample, part of the Healthcare Cost and Utilization Project and the largest publicly available in-patient database providing information on characteristics and outcomes of patients discharged from United States community hospitals we identified 107333 patients 18 years of age or older presenting with STEMI in the calendar years 2008-2010. Among those, 11487 had a diagnosis of COPD.

Results: Patients with COPD were in general older, with a higher proportion of females and a higher prevalence of smoking and diabetes mellitus but lower prevalence of hypertension. They were more likely to have shock and to undergo coronary artery bypass surgery (CABG) but less likely to be treated with percutaneous coronary intervention (PCI). COPD patients had higher in-hospital mortality (9.2 vs. 6.5 p<0.001) even after adjusting for pertinent clinical and procedural variables using logistic regression analysis (p < 0.001, OR 1.17 [1.08 - 1.26]).

Conclusions: Among patients presenting with STEMI, those with COPD have higher in-hospital mortality.

Results			
	Non COPDC	COPD	p-Value
N	95846	11487	NA
AGE (YRS)	62.7±14	66.7±12	<0.001
HTN	53%	52%	0.06
SMOKING	30%	49%	<0.001
OBESITY	10%	11%	0.02
DIABETES MELLITUS	26%	28%	<0.001
CABG	7%	11%	<0.001
PCI	75%	63%	<0.001
SHOCK	10%	14%	<0.001